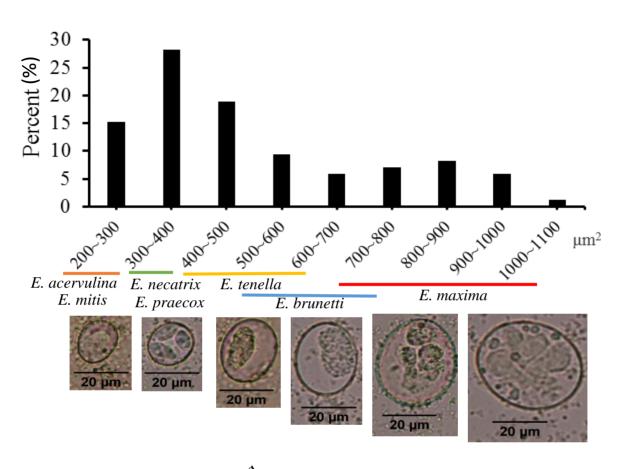
#### **Supplementary Information**

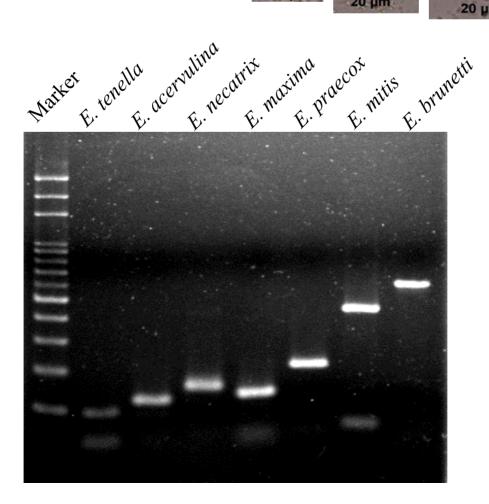
#### Field trial of medicinal plant, Bidens pilosa, against eimeriosis in broilers

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### S<sub>1</sub>A



## S<sub>1</sub>B



#### S<sub>1</sub>C

| Species       | Base pairs | Primer set                    |
|---------------|------------|-------------------------------|
| E. tenella    | 121 bp     | TCGTCTTTGGCTGGCTATTC          |
|               |            | CAGAGAGTCGCCGTCACAGT          |
| E. acervulina | 124 bp     | CTCGCGTGTCAGCACTACAT          |
|               |            | GATACGCTGCTTTGCCTTTC          |
| E. necatrix   | 141 bp     | AACGCCGGTATGCCTCGTCG          |
|               |            | GTACTGGTGCCAACGGAGA           |
| E. maxima     | 138 bp     | TCGTTGCATTCGACAGATTC          |
|               |            | TAGCGACTGCTCAAGGGTTT          |
| E. praecox    | 278 bp     | CATCGGAATGGCTTTTTGAAAGCG      |
|               |            | GCATGCGCTAACAACTCCCCTT        |
| E. mitis      | 460 bp     | AGTCAGCCACCAGTAGAGCCAATATTT   |
|               |            | AGTCAGCCACAAACAAATTCAAACTCTAC |
| E. brunetti   | 626 bp     | TGGTCGCAGAACCTACAGGGCTGT      |
|               |            | TGGTCGCAGACGTATATTAGGGGTCTG   |

**Sup. Fig. S1**. Characterization of *Eimeria* species on the poultry farm. Feces were collected from the poultry farm before the field trial. (A) The oocysts were collected from stool samples, examined under a microscope and counted. Their composition and photographs are shown. (B-C) DNA from the oocysts (A) was extracted. The DNA was used as a template to perform polymerase chain reaction in the presence of 7 primer sets of *Eimeria* species (C). The PCR products and DNA markers were analysed using DNA gel electrophoresis. Their representative image is indicated (B).

# Supplementary Table S1. Proximate composition and gross energy of the feed used in the study.

|                               | Percentage of <i>B. pilosa</i> <sup>a</sup> in diets <sup>a</sup> |           |          |  |
|-------------------------------|---|-----------|----------|--|
|                               | 0% BP   | 0.025% BP | 0.05% BP |  |
| Crude protein (%)             | 20.80   | 20.75     | 20.70    |  |
| Crude fat (%)                 | 7.39  | 7.37      | 7.35     |  |
| Ash (%)                       | 4.54  | 4.53      | 4.52     |  |
| Crude fiber (%)               | 2.61  | 2.60      | 2.60     |  |
| Carbohydrate (%) Gross Energy | 52.79   | 52.91     | 53.03    |  |
| (kcal/kg)                     | 3100  | 3092      | 3085     |  |
| CP <sup>b</sup> (μg/kg)       | 0   | 14.3      | 28.5     |  |

<sup>&</sup>lt;sup>a</sup>Composition of standard diet (0% BP) and standard diet containing 0.025% and *B. pilosa extract* (0.05% BP) *B. pilosa extract*, respectively.

<sup>&</sup>lt;sup>b</sup>Cytopioyne (CP) content of different diets was determined based on HPLC chromatography.